Facility Name: **Albany Lumber**
City: Albany
County: Dougherty
AIRS #: 04-13-09500117

Application #: TV-538575
Date Application Received: February 9, 2021
Permit No: 2421-095-0117-V-02-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name:

   Albany Lumber

2. Parent/Holding Company Name

   Georgia-Pacific Wood Products LLC

3. Previous and/or Other Name(s)

   None

4. Facility Location

   3150 Sylvester Road, Albany, Georgia 31705 (Dougherty County)

5. Attainment, Non-attainment Area Location, or Contributing Area

   Albany Lumber (hereinafter "facility") is located in Dougherty County, an attainment area to all criteria pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
2421-095-0117-P-01-0	January 23, 2019	PSD permit for the greenfield facility.
2421-095-0117-P-01-1	December 11, 2019	Addition of a condensate evaporation pond.
2421-095-0117-P-01-2	February 26, 2020	Amending two permit conditions.

D. Process Description

1. SIC Codes(s)

   2421 – Sawmill and Lumber mills

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

The lumber mill produces green and kiln dried lumber. Byproducts from lumber production included pine bark, sawdust from the sawmill and planer mill, wood chips from the chippers, and planer mill shavings.

3. Overall Facility Process Description

The facility's processes include green end processing, sawmill, lumber drying in kilns, planer mill system for final product finishing, by-product processing (bark, chips, sawdust etc.)

Logs are delivered to the facility via trucks. Logs are stored in storage area. Logs are next debarked in a debarker (LD). Debarked logs go through a metal detector before going to a log bucking sizing saw (LB). Logs without apparent defects are sent to a sawmill (SM) where the logs are sawed. The green lumber then goes to a green sorter where the lumber is separated by dimension and length. The green lumber then goes to drying kilns and planer mills for further processing. Some green lumber may be processed into stacking sticks via the Ripper Saw (IS).

The green lumber is stickered and stacked prior to heading to one of three direct-fired continuous kilns (CDK1 through CDK3). Each of the three kilns has an annual production capacity of 120,000 MBF/yr, and each is equipped with a 45-million Btu per hour (MMBtu/hr) natural gas-fired burner. After drying, the lumber is removed from the kilns and placed in the cooling sheds prior to planing. Broken boards may be processed by the Broke Board Trim Saw which is used to remove damaged sections of the board (IS). Condensate from the kilns is evaporated in the Kiln Condensate Mechanical Evaporator (EVAP).

In the planer mill, dried, dimensional lumber is planed (mechanical smoothing of the rough surfaces) into finished products, graded, trimmed, and stacked for sale. The finished lumber may be stored in lumber sheds prior to shipment offsite. The planer mill generates dry planer shavings. Trim blocks and sawdust generated by the planer mill are hogged by the fully enclosed planer mill hog. The planer mill shavings cyclofilter (PMC) receives shavings, sawdust, and hogged material from the planer and hammer hog. Wood residuals are pneumatically conveyed from PMC to the truck shavings bin. Shavings are loaded directly into trucks from the shavings bin bottom discharge for shipment off-site.

Bark and sawdust from the debarker (LD) are sent to a bark hog and then conveyed to a truck loading system for shipment off-site. Chips and sawdust from the sawmill (SM) and sawdust from log bucking sizing saw (LB) are conveyed to the shaker screen. The screen separates the sawdust from the chips and oversized chips are re-chipped (if needed) by the sawmill chipper. The sawdust from the shaker screen is mechanically conveyed to the sawdust storage bin. Sawdust is loaded directly into trucks from the sawdust bin bottom discharge for shipment off-site. The chips are conveyed to either the chip pile or chip loading area for off-site shipment.

The mill has two 5,000-gallon diesel storage tanks (T1 and T2), one 1,000-gallon gasoline storage tank (T3), haul roads, and a 274-Hp diesel-fired engine driven fire water pump (FE).

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

Albany Lumber Mill is a PSD major source for volatile organic compound (VOC) emissions. The facility underwent a PSD review for VOC emissions and obtained its first permit, No. 2421-095-0117-P-01-0, on January 23, 2019.

Since Dougherty County is attained for all criteria pollutants, non-attainment area new source review (NAA NSR) does not apply.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	yes			✓
PM_{10}	yes			✓
$PM_{2.5}$	yes			✓
SO_2	yes			✓
VOC	yes	✓		
NO_x	yes			✓
CO	yes			✓
Individual HAP	yes	✓		
Total HAPs	yes	✓		

3. MACT Standards

There are no applicable requirements of 40 CFR 61 that would apply to the facility.

Since the facility is a major source for single and combined HAP, its drying kilns (ID Nos. CDK1 through CDK3) are subject to 40 CFR 63 Subpart DDDD while the fire pump engine is subject to 40 CFR 63 Subpart ZZZZ. Detailed rule applicability is discussed in Section III.B. of this Narrative.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	yes
Program Code 8 – Part 61 NESHAP	no
Program Code 9 - NSPS	yes
Program Code M – Part 63 NESHAP	yes
Program Code V – Title V	yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

Not applicable.

D. Permit Conditions

None.

III. Regulated Equipment Requirements

A. Equipment List for the Process

		Specific Limitations/Requirements	Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**ID No.**	**Description**
CDK1	Drying Kiln No. 1 Direct-fired / Continuous Fuel Type = Natural Gas Capacity = 120 MMbf/yr NG Burner 45 MMBTU/hr	40 CFR 52.21(j) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i) 391-3-1-.02(2)(g)2.	N/A	None
CDK2	Drying Kiln No. 2 Direct-fired / Continuous Fuel Type = Natural Gas Capacity = 120 MMbf/yr NG Burner 45 MMBTU/hr	40 CFR 52.21(j) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i) 391-3-1-.02(2)(g)2.	N/A	None
CDK3	Drying Kiln No. 3 Direct-fired / Continuous Fuel Type = Natural Gas Capacity = 120 MMbf/yr NG Burner 45 MMBTU/hr	40 CFR 52.21(j) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i) 391-3-1-.02(2)(g)2.	N/A	None
PM	Planer Mill 360 MMBF/yr	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.	PMC	Planer Mill Shavings Cyclofilter
FE	Emergency Fire Pump Engine	40 CFR 52.21(j) 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2.	N/A	None
EVAP	Kiln Condensate Mechanical Evaporator	391-3-1-.02(2)(n)	N/A	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

B. Equipment & Rule Applicability

40 CFR 52.21 - Prevention of Significant Deterioration of Air Quality

The facility submitted PSD Application No. 26682 which was received on August 24, 2018 for the construction and operation of the greenfield facility. According to the preliminary determination (PD) that explained PSD Permit No. 2421-095-0117-P-01-0, the facility would be capable of emitting 771 tons per year (tpy) of VOC emissions. Since the facility was capable of emitting more than the VOC PSD major source threshold of 250 tpy, the construction and operation of the greenfield facility triggered a PSD review. VOC was the only pollutant that has a potential-to-emit (PTE) exceeding the associated PSD Significant Emission Rate (SER), the PSD review was conducted for VOC only.

The facility conducted VOC best available control technology (BACT) analyses for the drying kilns (ID Nos. CDK1 through CDK3) and fire pump engine (ID No. FE). Various control technologies were reviewed for both emission groups. Below are BACT analyses conclusions included in that PD:

- The selected and approved VOC BACT for the kilns was "proper kiln design and operation." The associated VOC BACT limits were the long term VOC emission rate which was capped by the annual throughput limit for all three kilns, 360 million board feet per year (MMbf/yr) and operating the kilns according to the work practice and preventive maintenance program (WPPMP).

  In addition to the above, the facility also proposed to continuously monitor the moisture content of the kiln dried lumber downstream of the planer mill. In theory, a lower final product moisture content may indicate longer drying period and perhaps more VOC emissions. However, this does not take into account that raw wood materials may have different initial moisture content. Also, the Division lacks enough data to prove the direct relationship of VOC emissions and final product moisture content. Albany Lumber is one of the very few, if not the only one, that has been required to monitor moisture content of the dried lumber. Moisture content is really more a factor for product quality rather than VOC emission level. Therefore, during the review of the initial Title V permit application, the Division has determined to remove the lumber moisture content monitoring requirements.

  In order to streamline with other lumber facilities that undergo PSD reviews, the condition that includes the WPPMP requirements will no longer include all the detailed items, especially no wet bulb temperature nor lumber moisture content (which are more related to product quality instead of VOC emission level) would be itemized in the condition.

- The selected and approved VOC BACT for the fire pump engine was "good combustion practices." The facility proposed a VOC BACT limit, 0.00251 pound total organic compound per Horsepower-Hour (lb TOC/Hp-hr), that was more stringent that the associated VOC emission standard listed in 40 CFR 60 Subpart IIII.

  Normally, fire pump engines are exempt from permitting and would not be included in Table 3.1 of a permit. Since FE is subject to a VOC BACT limit, it is included in Table 3.1 of the permit; the permit would also include all applicable requirements specified in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ for FE.

- The facility owns and operates two diesel and one gasoline storage tanks. Note that diesel (distillate fuel oil) has a very low vapor pressure under atmospheric condition; the facility estimated only 0.01 tpy VOC from the diesel storage tanks. Therefore, no VOC BACT was chosen for the diesel storage tanks. Gasoline has a much higher vapor pressure at atmospheric condition, and the facility estimated 0.38 tpy VOC from the gasoline storage tank (ID No. T3). The facility proposed submerged tank filling with light color paint on the tank exterior for T3.

The facility submitted Application No. 27218 for adding a mechanical kiln condensate evaporator using mechanical sprayers in onsite pond. PSD Permit Amendment No. 2421-095-0117-P-01-1 was issued on December 11, 2019 (within the same year when P-01-0 was issued). This project was treated as the same project of the greenfield facility. Due to large pond surface area and fugitive nature of the emissions, it is not feasible to collect the evaporated VOC from the retention pond. Therefore, the selected and approved VOC BACT was "no control."

Note in PSD Application No. 26682, the greenfield facility did not trigger PSD review for any other criteria pollutants because PTE for all the other criteria pollutants are all below the associated PSD SERs, show in the following table.

Table 3: Emission Increases for the PSD Project in PSD Application No. 26682			
Pollutant	PTE (tpy)	PSD SER (tpy)	Trigger PSD?
NOx	32.2	40	No
CO	43.4	100	No
VOC	771	40	Yes
SO_2	0.440	40	No
PM	12.2	25	No
PM_{10}	12.8	15	No
$PM_{2.5}$	9.69	10	No

During the courtesy review of the proposed draft initial Title V permit, the facility pointed out that each of the three drying kilns (ID Nos. CDK1 through CDK3) were installed with a 45-MMBtu/hr burner, instead of a 40-MMBtu/hr burner. Using the same emission calculation methodology used in PSD Application No. 26682, $PM_{2.5}$ PTE would exceed 10 tpy, and a retro-active PSD review could have been triggered.

PM2.5 PTE for All Three Drying Kilns
= [(0.022 lb $PM_{2.5}$/Mbf) * (360,000 Mbf/yr) + (45 MMBtu/hr) * (1 MMcf NG/1,020 MMBtu) * (7.60 lbs $PM_{2.5}$/MMcf NG) * (3 burners) * (8,760 hrs/yr)] * (1ton $PM_{2.5}$/2,000 lbs $PM_{2.5}$)
= 8.37 tpy $PM_{2.5}$

Increase $PM_{2.5}$ PTE (Facility-wide $PM_{2.5}$ PTE)
= 0.23 tpy from sawmill + 8.37 tpy from 3 kilns + 1.43 tpy from planer mill + 0.02 tpy from fire pump engine + 0.16 tpy from haul roads
= 10.2 tpy $PM_{2.5}$ > 10 tpy $PM_{2.5}$

Note that U.S.EPA has not currently (March 2023) finalized the new PSD rule that could completely remove the exemption to include fugitive emissions specified in 40 CFR 52.21(b)(2)(v) (which has been indefinitely stayed since March 2011; the Division normally does not include fugitive emissions for major PSD modification determination when the facility is not one of the 28 named PSD source categories. The facility could have justified the burner change by not including fugitive emissions like the haul roads and sawmill in the facility-wide $PM_{2.5}$ PTE.

According to the email from Ms,. Maria Zufall of Georgia Pacific, the facility and its legal team have decided to be more conservative by keeping the fugitive emissions in their facility-wide PTE. In order to avoid a PSD review for $PM_{2.5}$ for PSD Application No. 26682, the facility has proposed an annual natural gas consumption limit that is equivalent to the originally assumed 40-MMBtu/hr burners and kept the original facility-wide $PM_{2.5}$ PTE of 9.69 tpy.

Annual Natural Gas Consumption
= (40 MMBtu/hr) * (8,760 hrs/yr) * (3 Burners)
= 1,051,200 MMBtu/yr
= 1,030 MMcf NG

The Division agrees with the facility's request, and has added the 1,030 MMcf natural gas per year consumption limit in Condition 3.2.5. Note that if the kilns fire any fuel other than natural gas, e.g., wood, PTE for $PM/PM_{10}/PM_{2.5}$ could all have been greater than the associated PSD SERs; therefore, Condition 3.2.5 is cited as PSD avoidance for $PM/PM_{10}/PM_{2.5}$.

40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

According to 40 CFR 60.4200(a)(2)(ii), 40 CFR 60 Subpart IIII applies to owners and operators of stationary compressed ignition internal combustion engines (CI ICE) that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are fire pump engines. Fire Pump Engine FE was manufactured after April 1, 2006, and is therefore subject to 40 CFR 60 Subpart IIII. The applicable requirements are:

- FE has a maximum engine power of 274 horsepower (Hp) and a displacement of less than 30 liters per cylinder. According to 40 CFR 60.4205(c), it must comply with the emission standards specified in Table 4 to 40 CFR 60 Subpart IIII.

- 40 CFR 60.4206 and 60.4211(a) require that the facility operate and maintain FE according to the engine manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engines.

- 40 CFR 60.4207(b) subjects the diesel fuel burned in FE to the requirements of 40 CFR 1090.305 for nonroad diesel fuel. In particular, the diesel fuel cannot contain more than 15 ppm sulfur.

- 40 CFR 60.4209(a) requires that the facility install a non-resettable hour meter on FE.

- 40 CFR 60.4211(c) requires that the facility comply with the emission standards specified in 40 CFR 60.4205(c) by purchasing an engine certified to these emission standards.

- The facility must operate FE in accordance with the requirements specified in 40 CFR 60.4211(f) (operating time limits under different situations).

Note that FE is being kept as a significant emission unit in the "front" of the permit simply because it is subject to a VOC BACT limit.

40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

According to Table 2 of this Narrative, the facility is major for single HAP and combined HAP. According to 40 CFR 63.2231(a) and (b), the facility is subject to 40 CFR 63 Subpart DDDD, which is often referred to as the Plywood MACT, because it is a plywood and composite wood products (PCWP) manufacturing facility that manufactures kiln-dried lumber at a HAP major source. According to 40 CFR 63.2232(b), the drying kilns (ID Nos. CDK1 through CDK3) are affected sources. Please note that the kilns are not subject to any compliance options specified in Tables 1A and 1B to Subpart DDDD, any operating requirements specified in Table 2 to Subpart

DDDD, or any work practice requirements specified in Table 3 to Subpart DDDD. According to 40 CFR 63.2252, the facility is only subject to the initial notification requirements specified in 40 CFR 63.9(b). The initial notification requirements were already complied with; therefore, the facility is considered to be in full compliance with the Plywood MACT.

40 CFR 63 Subpart ZZZZ *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

40 CFR 63.6585 states that 40 CFR 63 Subpart ZZZZ is applicable to all stationary reciprocating internal combustion engines (RICE) at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. Therefore, Fire Pump Engine FE is subject to 40 CFR 63 Subpart ZZZZ. According to 40 CFR 63.6590(a)(2)(ii), FE has a rating below 500 brake HP and was constructed after June 12, 2006, it was a new stationary RICE.

According to 40 CFR 63.6590(c)(6), as FE is a new emergency stationary RICE with a site rating of less than 500 brake HP located at a HAP major source, FE must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII. No further requirements apply for FE under 40 CFR 63 Subpart ZZZZ.

Georgia State Rules

Drying Kilns CDK1 through CDK3 and Planer Mill PM

The three drying kilns and planer mill are each subject to Georgia Air Quality Rule 391-3-1-.02(2)(b) "Visible Emissions" and Rule 391-3-1-.02(2)(e) "Particulate Emission from Manufacturing Processes." Georgia Rule 391-3-1-.02(2)(b)1. limits the opacity of their visible emissions to forty (40) percent. Since they were all installed after July 2, 1968, the allowable PM emission rate from each process is specified by Georgia Rule 391-3-1-.02(2)(e)1.(i), which is stated as follows:

$E = 4.1 * P^{0.67}$ for process input weight rate up to and including 30 tons per hour.
$E = 55 * P^{0.11} - 40$ for process input weight rate above 30 tons per hour.

Where E equals the allowable PM emission rate in pounds per hour and P equals the process input weight rate in tons per hour.

Since the planer mill is equipped with a cyclofilter (ID No. PMC), compliance with the GA Rule (b) visible emission limit and GA Rule (e) PM emission limit are expected.

Compliance with the GA Rule (e) PM emission standards for the three drying kilns is expected as follows.

Table 3: GA Rule (e) PM Emission Standards for Kilns CDK1 through CDK3

Name/ID No.	Process Input Weight Rate (P) (MMbf/yr)	Process Input Weight Rate (P) (tons/hr)	Allowable Emission Rate (E) (lbs PM / hr)
CDK1 – CDK3, Each	120	27.4	$P = 4.1 * 27.4^{0.67} = 37.7$

1 ft^3 = 12 bf
Assumed Wood Density = 48 lbs/ft^3

120 MMbf/yr
= (120,000,000 bf/yr)*(1 ft^3/12bf)*(48 lbs/ft^3)*(1 ton/2,000 lbs)*(1 yr/8,760 hrs)
= 27.4 tph

PM emission rate for a kiln = 0.14 lb/Mbf

PM Emission Rate of CDK1 through CDK3, Each
= (0.14 lb PM/Mbf)*(120,000 MMbf/yr)*(1 yr/8,760 hrs)
= 1.92 lbs PM/hr < 37.7 lbs PM/hr

Fire Pump Engine FE

The fire pump engine is subject to the visible emission limit specified in GA Rule (b) and the fuel sulfur content limit specified in GA Rule (g). Since FE fires exclusively on diesel fuel, and diesel fuel is considered a clean fuel, compliance with the GA Rule (b) visible emission limit is expected. By definition, diesel fuel contains less than 0.5% sulfur, compliance with the GA Rule (g) 2.5-percent fuel sulfur content limit is expected.

Kiln Condensate Mechanical Evaporator EVAP

The kiln condensate mechanical evaporator is subject to GA Rule (n) for fugitive emissions. Since the evaporator and retention pond are liquid process, compliance with the GA Rule (n) limit is expected.

C. Permit Conditions

The requirements specified in existing Conditions 2.4 and 2.5 of PSD Permit No. 2421-095-0117-P-01-0 have been satisfied and are no longer needed. Therefore, they are not included in the proposed initial Title V permit.

Since the facility should comply with 40 CFR 63 Subpart ZZZZ by complying with all applicable requirements of 40 CFR 60 Subpart IIII, the facility would not be subject to any other requirements of 40 CFR 63 Subpart ZZZZ. Therefore, the requirements specified in existing Condition 2.12 are not included in the proposed initial Title V permit.

Condition 3.2.1 (existing Condition 2.1) limits the combined production from all three drying kilns to 360 MMbf/year. This is the long term VOC BACT limit for CDK1 through CDK3.

Condition 3.2.2 (existing Condition 4.2) requires that the facility implement the WPPMP for the three drying kilns in order to demonstrate the approved VOC BACT of "proper kiln design and operation." As explained previously, the condition no longer include the itemized list.

Condition 3.2.3 (existing Condition 2.2) includes the short term VOC BACT limit for the fire pump engine (ID No. FE).

Condition 3.2.4 (existing Condition 2.3) contains the VOC BACT operating standard for the gasoline storage tank (ID No. T3).

Condition 3.2.5 (existing Condition 2.15) includes the fuel type requirement for the three drying kilns (ID Nos. CDK1 through CDK3). This is a $PM/PM_{10}/PM_{2.5}$ PSD avoidance limit. As discussed previously, this condition also contains an annual natural gas consumption limit in order to avoid triggering the PSD review for $PM_{2.5}$ due to the kiln burner capacity change. Also, toxic impact assessment (TIA) for PSD Application No. 26682 was conducted based on the kilns firing natural gas. If the facility changes the fuel type, additional TIA will be required. For example, burning wood would emit hydrogen chloride which was not a combustion product of firing natural gas. Finally, this limit subsumes the GA Rule (g) fuel sulfur content limit.

Condition 3.2.6 contains the new requirement that the facility must operate the powered exhaust fans on each drying kiln at all times during their operation. The TIA for PSD Application No. 26682 was conducted based on 80% of emissions exit the powered exhaust fans with a high vertical velocity. So this requirement is needed for Georgia Air Toxics Guidelines purpose. Changing this condition will require an updated TIA.

Condition 3.3.1 (existing Condition 2.7) subjects the fire pump engine to 40 CFR 60 Subpart IIII.

Condition 3.3.2 (existing Condition 2.8 of Permit Amendment P-01-2) subjects the fire pump engine to the emission standards specified in Table 4 to 40 CFR 60 Subpart IIII.

Since the facility would comply with the emission standards by purchasing a certified engine, the facility is required to operate the fire pump engine in accordance with the manufacturer's written instructions or procedures. Condition 3.3.3 (existing Condition 7.11) contains the requirements.

Condition 3.3.4 (existing Condition 2.9) contains the fuel requirements specified in 40 CFR 1090.305 for the fire pump engine.

Condition 3.3.5 (existing Condition 2.10) contains the requirements specified in 40 CFR 60.4211(f).

Condition 3.3.6 (existing Condition 2.6) subjects the three drying kilns to 40 CFR 63 Subpart DDDD.

Condition 3.3.7 (existing Condition 2.11) subjects the fire pump engine to 40 CFR 63 Subpart ZZZZ.

Condition 3.4.1 (existing Condition 2.13) subjects the kilns, planer mill, and fire pump engine to the GA Rule (b) visible emission standard.

Condition 3.4.2 (existing Condition 2.14) subjects the kilns and planer mill to the GA Rule (e) PM emission standards.

Conditions 3.4.3 and 3.4.4 (existing Conditions 3.1 and 3.2) include the GA Rule (n) requirements for minimizing fugitive dust.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

None applicable.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

As discussed previously, the Division has determined that monitoring lumber moisture content is not a good indicator of VOC emissions from the drying kilns. This monitoring requirement is not necessary. Therefore, the requirement in existing Condition 5.2 of PSD Permit 2421-095-0117-P-01-0 is not included in the proposed initial Title V permit.

Condition 5.2.1 (existing Condition 5.3) contains the monitoring requirement specified in 40 CFR 60.4209(a).

Condition 5.2.2 (existing Condition 4.1) requires weekly inspection of the planer mill shavings cyclofilter in order to ensure the proper operation of the cyclofilter.

C. Compliance Assurance Monitoring (CAM)

An emission unit is subject to the provisions of 40 CFR 64, "Compliance Assurance Monitoring" because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard for the applicable pollutant (PM). [§64.2(a)(1)]
- The facility uses a control device to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from such emission unit are at least 100 percent of major source threshold. [§64.2(a)(3)]

Drying Kilns CDK1 through CDK3 and Fire Pump Engine FE are not equipped with any control devices, so they are not subject to any CAM requirements.

Although the planer mill (ID No. PM) is equipped with a cyclofilter (ID No. PMC), the Division believes that the control device is installed to reclaim material rather than for achieving compliance with the GA Rule (b) visible emission standard and GA Rule (e) PM emission standards. Without the control devices, the planer mill could easily be categorized as fugitive emission sources, and their pre-control PM emissions are believed to be insignificant and minimal (much less than 100 percent of major source threshold) due to the nature of the large size of PM generated by these sources. Therefore, the Division determines that the planer mill is not subject to the CAM requirements.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Condition 6.1.7 contains the following definitions of exceedances and excursions:

- Subparagraph b.i. (existing Condition 7.2) defines an exceedance as any 12-consecutive month during which the combined total amount of lumber dried in all three drying kilns exceeds 360 million board feet.

- Subparagraph b.ii. defines an exceedance as any period during which the fuel burned in the drying kilns does not meet the fuel specifications in Condition 3.2.5.

- Subparagraph b.iii. defines an exceedance as any 12-consecutive month during which the combined natural gas consumption by all three drying kilns exceeds 1,030 MMcf.

- Subparagraph b.iv. (existing Condition 7.3) defines an exceedance as any period during which fuel oil burned in the fire pump engine does not meet the specifications in Condition 3.3.4.

- Subparagraph c.i. defines an excursion as any time the powered exhaust fans of the drying kilns are not operated while the associated kiln is in operation.

- Subparagraph c.ii. (existing Condition 7.4) defines an excursion as any adverse condition discovered by the weekly inspections of the planer mill cyclofilter (PMC), required in Condition 5.2.2, that is not corrected within 48 hours.

- Subparagraph c.iii. defines an excursion as any adverse condition discovered by the inspection specified in the WPPMP required in Condition 3.2.2 that is not corrected promptly.

Note that the record keeping requirements specified in existing Condition 7.5 of PSD Permit No. 2421-095-0017-P-01-0 was not necessary as that PSD permit does not contain any natural gas consumption limit. This requirement is not included in the proposed initial Title V permit.

The notification requirements specified in existing Condition 7.14 of PSD Permit No. 2421-095-0017-P-01-0 have already been satisfied. This requirement is not included in the proposed initial Title V permit.

Condition 6.2.1 (existing Conditions 7.6 and 7.9) requires monthly records of the amount of lumber dried in the three drying kilns for demonstrating compliance with the drying limit in Condition 3.2.1.

Condition 6.2.2 (existing Condition 7.7) requires the Permittee to maintain a rolling total of the combined amount of lumber dried in the three drying kilns over the last twelve consecutive months each month to confirm compliance with the drying limit in Condition 3.2.1.

Condition 6.2.3 requires that the Permittee to record each month the combined natural gas consumption by all three drying kilns (burners) for demonstrating compliance with the natural gas consumption limit in Condition 3.2.5.

Condition 6.2.4 requires that the Permittee maintain a rolling total of the natural gas consumption by all three drying kilns (burners), combined, over the last twelve consecutive months each month to confirm compliance with the natural gas consumption limit in Condition 3.2.5.

Condition 6.2.5 (existing Condition 7.10) requires that the facility demonstrate compliance with the emission limits specified in Conditions 3.2.3 and 3.3.2 by purchasing an engine certified to comply with these emission standards. Note that Condition 3.3.3 requires that the facility operate and maintain the fire pump engine according to the engine manufacturer's written instructions so that emissions will relatively assured to stay below the emission standards.

Condition 6.2.6 (existing Condition 7.13) requires that the facility obtain fuel oil supplier certification demonstrating that the diesel fuel complies with the specifications required in Condition 3.3.4.

Conditions 6.2.7 and 6.2.8 (existing Condition 7.12) contain the record keeping requirements specified in 40 CFR 60.4214(b).

Condition 6.2.9 (existing Condition 7.8) requires that the facility submit the 12-month rolling totals of the combined amount of dried lumber processed through the three drying kilns in the semiannual reports.

VII. Specific Requirements

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

Refer to http://gatv.georgiaair.org/GATV/default.asp for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

D. Temporary Sources

Not applicable.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

Not applicable.

I. Stratospheric Ozone Protection Requirements

The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the proposed initial Title V permit. According to Applications No. TV-538575, the facility operates equipment that is subject to Title VI of the 1990 Clean Air Act Amendments.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//